SELF-ALIGNED CONDUCTIVE LINES FOR FET-BASED MAGNETIC RANDOM ACCESS MEMORY DEVICES AND METHOD OF FORMING THE SAME

## ABSTRACT OF THE INVENTION

A conductive line structure for a field effect transistor (FET) based magnetic random access memory (MRAM) device includes a lateral metal strap conductively coupled to a lower metallization line. A magnetic tunnel junction (MTJ) stack is formed on the metal strap, and a metal shield is formed over the MTJ stack, the metal shield being self-aligned with respect to the metal strap. An upper metallization line is conductively coupled to the metal shield, wherein the metal shield serves as an etch stop during the formation of the upper metallization line.